

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY TIDEWATER REGIONAL OFFICE

Molly Joseph Ward Secretary of Natural Resources 5636 Southern Boulevard, Virginia Beach, Virginia 23462 (757) 518-2000 Fax (757) 518-2009 www.deq.virginia.gov

David K. Paylor Director

Maria R. Nold Regional Director

December 21, 2015

Mr. Edward G. Henifin, P.E. General Manager Hampton Roads Sanitation District Virginia Initiative WWTP PO Box 5911 Virginia Beach, Virginia 23471-0911

Location: Norfolk Registration No.: 60350

Dear Mr. Henifin:

Attached is a minor amendment to your Federal Operating Permit to operate the Virginia Initiative WWTP with sludge incineration pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit replaces your previous permit dated November 7, 2015.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

This approval to operate does not relieve HRSD of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Mr. Edward G. Henifin Hampton Roads Sanitation District Virginia Initiative WWTP December 21, 2015 Page 2

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director Department of Environmental Quality PO Box 1105 Richmond, VA 23218-1105

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part 2A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact Ms. Laura D. Corl at 757-518-2178 or by e-mail at laura.corl@deq.virginia.gov.

Sincerely,

Maria R. Nold Regional Director

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Attachments: Permit

Statement of Legal and Factual Basis

cc: Manager, Data Analysis (electronic file)
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (electronic file submission)
Manager/Inspector, Air Compliance



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Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9VAC5-80-50 through 9VAC5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Hampton Roads Sanitation District

Facility Name: Virginia Initiative WWTP Facility Location: 4201 Powhatan Road

Norfolk, Virginia

Registration Number: 60350 Permit Number: TRO-60350

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 3 through 28) State Only Enforceable Requirements (Page 29)

December 21, 2015	November 6, 2020
Effective Date	Expiration Date
	December 21, 2015
Maria R. Nold	Signature Date

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	EMISSION UNITS INCINERATOR REQUIREMENTS — (I-1 AND I-2)		

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I. Facility Information

<u>Permittee</u>

Hampton Roads Sanitation District PO Box 5911 Virginia Beach, Virginia 23471

Responsible Official
Mr. Edward G. Henifin, P.E.
General Manager

Facility
Virginia Initiative WWTP
4201 Powhatan Road
Norfolk, Virginia 23508

Contact Person Mr. Mark Feltner Environmental Scientist 757-460-4254

County-Plant Identification Number: 51-710-00197

Facility Description: NAICS 221320, 562219 and 562213

The Hampton Roads Sanitation District (HRSD) is a political subdivision of the Commonwealth of Virginia and was established as a governmental instrument to provide for the public health and welfare by abating water pollution in the Hampton Roads area through the interception of wastewater outfalls and providing wastewater treatment plants. All of the HRSD treatment plants are interconnected for diverting wastewater flow to alternate treatment locations as the area's daily amount of generated wastewater flow varies along with the operational capabilities of each plant. The Virginia Initiative WWTP provides both primary and secondary municipal wastewater treatment for the Hampton Roads area, serving mainly Norfolk clients. The Virginia Initiative WWTP is rated to treat a design maximum average dry weather flow rate of 40 million gallon per day (mgd). The facility process units are grouped into four main functions: liquids management, solids handling, sludge incineration, and electrical generators.

Liquids management -- Liquids management consists of all of the unit processes that treat the received wastewater prior to discharge to the Elizabeth River. These unit processes include the septic tank truck unloading station, headworks (influent screening and pumping)/grit removal chamber, aerobic, anaerobic, anoxic reactors, primary and secondary clarification, and disinfection contact basins (exist tank and new contact channel).

Solids handling -- Solids handling consists of unit processes that treat liquid treatment by-product streams before disposal. These streams consist of primary solids from the Primary Solids day tank, the primary scum concentrators, waste activated solids and side-stream solids from a local waste treatment facility. The solids are processed through pumps to a dewatering centrifuge then screws route the dry solids to a belt that conveys solids to the incinerator.

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Sludge incineration -- Sludge incinerator units are comprised of two identical multi-hearth incinerators used to dispose of dewatered solids from the solids handling sections. Each incinerator has 10 hearths, a dedicated induced-draft fan, and air pollution control equipment for particulate matter consisting of a pre-cooler, venturi scrubber, and an impingement (tray) scrubber. The incinerators can fire either natural gas or distillate oil as supplemental fuel in the combustion process.

Electrical generators -- Three diesel engine emergency generator sets. The electrical generators are used mainly for occurrences of normal power lost, but can also, upon request, be used for an ISO declared emergency.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Incinerator	s						
I-1/I-2	2	Multi hearth sludge incinerators (natural gas or distillate oil as backup), 1973	21 burners rated at 2.7 MMBTU/hr each per incinerator. 45 dry tons/day (sludge) per incinerator	Pre-cooler with Venturi scrubber followed by impingement (tray) scrubber (water only). ARCO Products Model No. VS-37-JS-2070, 1973. (Venturi replacement – TurboSonic, 2010.)	ISBR-1/ ISBR-2	PM/PM-10 (Odor)	02/13/73 (State Only)
Liquids Ma	nageme	nt					
L-1	3a 3b	Liquids Management, 1943 Preliminary Treatment Facility, 2015	40 mgd (dry) (wastewater)	Two stage packed tower scrubber (water plus NaOCl & NaOH). Ershings, 1990. Two stage system, 8300 cfm (biological tower followed by NaOH & NaOCl scrubber). BioWay & Daniel Co., 2008.	LSBR-1/ LSBR-2	(Odor – H ₂ S)	N/A (State Only)
Solids Hand	dling						
S-1	4a 4b	Solids Handling, 1976	40 mgd (dry)	Two stage packed tower scrubber (water plus NaOCl and NaOH) Ershings 1990.	N/A	$(Odor - H_2S)$	N/A (State Only)
Plant Elect	rical Ger	nerators					
G-1 G-2 G-3	1	Three (3) diesel-fired generators (Cummings – QSK78 Series Engines, Model DQLE, manufactured 2014.)	2,500 kW Each	N/A	N/A	N/A	03/17/2014
Gasoline Dispensing							
T-42	-	Gasoline UST	1,000 gallons	N/A	N/A	N/A	N/A

^{*}The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement. (9VAC5-80-110, Condition 4 of NSR permit issued 02/13/73 and Condition 2 of NSR permit issued 03/17/2014)

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III. Incinerator Requirements – (I-1 and I-2)

A. Limitations

1. **Incinerator Requirements** – (**I-1 and I-2**) – **Limitations** - **Emissions** - Emissions from the operations of each incinerator (I-1/I-2) shall not exceed the limits specified in the table below:

Regulated Pollutant	Limitation/Standard	Applicable Requirement	Reference EPA Test Method
Hg	3200 grams/24-hour period	40 CFR 61, Subpart E, 61.52 (b)	Method 101A, 105, or 29

Compliance with these emission limits may be determined as stated in condition numbers 6, 22, 25, and 31-34

(9VAC5-80-110, 9VAC5-40-750, Condition 4.iii of 02/13/73 NSR permit and 40 CFR 61.52(b))

2. **Incinerator Requirements** – (**I-1 and I-2**) - **Limitations** – **Emissions** - **9VAC5 Chapter 40, Article 55** - Emissions from the operations of each incinerator (I-1/I-2) shall not exceed the limits specified by Table 3 to Subpart MMMM of 40 CFR Part 60 and summarized in the table below:

Pollutant	Limitation ^a	
PM	80 mg/dscm	
Hydrogen chloride	1.2 parts per million by dry volume	
Carbon monoxide	3,800 parts per million by dry volume	
Dioxins/furans (total mass basis)	5.0 nanograms per dry standard cubic meter; or	
Dioxins/furans (toxic equivalency basis) ^b	0.32 nanograms per dry standard cubic meter	
Mercury	0.28 milligrams per dry standard cubic meter	
Oxides of nitrogen	220 parts per million by dry volume	
Sulfur dioxide	26 parts per million by dry volume	
Cadmium	0.095 milligrams per dry standard cubic meter	
Lead	0.30 milligrams per dry standard cubic meter	
Fugitive emissions from ash handling	Visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) for no more than 5 percent of the hourly observation period	

^aAll emission limits are measured at 7 percent oxygen, dry basis at standard conditions.

These emission limits and standards apply at all times the unit is operating and during periods of malfunction. The emission limits and standards apply to emissions from a bypass stack or vent while sewage sludge is in the combustion chamber (i.e. until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time.) (9VAC5-80-110, 9VAC5-40-8220B, and 40 CFR 60.5165)

^bYou have the option to comply with either the dioxin/furan emission limit on a total mass basis or the dioxin/furan emission limit on a toxic equivalency basis.

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3. Incinerator Requirements – (I-1 and I-2) - Limitations – Operating Requirements - 9VAC5 Chapter 40, Article 55 – The permittee shall meet, as applicable, the operating limits and requirements specified in 40 CFR 60.5170 and 40 CFR 60.5175. Compliance shall be demonstrated as specified in 40 CFR 60.5185, 40 CFR 60.5190, 40 CFR 60.5195, 40 CFR 60.5200, 40 CFR 60.5205, 40 CFR 60.5210, and 40 CFR 60.5215. The permittee shall establish and meet operating limits and requirements for each combustion chamber, the fugitive emissions from ash handling and the wet scrubbers as outlined below (see Table 4 of 40 CFR 60 Subpart MMMM):

		And monitor u	sing these mini	mum frequencies
For these operating parameters	You must establish these operating limits	Data measurement	Data recording ^a	Data averaging period for compliance
All sewage sludge inciner	ation units			
Combustion chamber operating temperature (not required if afterburner temperature is monitored)	Minimum combustion chamber operating temperature or afterburner temperature	Continuous	Every 15 minutes	12-hour block
Fugitive emissions from ash handling	Site-specific operating requirements	Not applicable	Not applicable	Not applicable
Scrubber				
Pressure drop across each wet scrubber	Minimum pressure drop	Continuous	Every 15 minutes	12-hour block
Scrubber liquid flow rate	Minimum flow rate	Continuous	Every 15 minutes	12-hour block
Scrubber liquid pH	Minimum pH	Continuous	Every 15 minutes	3-hour block

^aThis recording time refers to the minimum frequency that the continuous monitor or other measuring device initially records data. For all data recorded every 15 minutes, you must calculate hourly arithmetic averages. For all parameters, you use hourly averages to calculate the 12-hour or 3-hour block average specified in this table for demonstrating compliance. You maintain records of 1-hour averages.

(9VAC5-80-110 and 9VAC5-40-8290B)

4. **Incinerator Requirements** – (**I-1 and I-2**) - **Limitations** - **Fuel**- The approved fuels for the incinerators are natural gas and distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396 "Standard Specification for Fuel Oils" or ASTM D975 "Standard Specification for Diesel Fuel Oil". A change in the fuels may require a permit to modify and operate.

(9VAC5-80-110 and Condition 4 of 02/13/73 NSR Permit)

5. Incinerator Requirements – (I-1 and I-2) - Limitations – Visible Emission Limit - Visible Emissions from the incinerator stack shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction. "Startup" means the setting in operation of an affected facility for any purpose. "Shutdown" means the cessation of operation of an affected facility for any purpose. "Malfunction" means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner that (i) arises from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, (ii) causes an exceedance of a technology based emission limitation under the permit due to unavoidable increases in emissions attributable to the failure and (iii) requires immediate corrective action to restore normal operation. Failures that are caused entirely or in part by improperly designed equipment, lack of or poor preventative maintenance, careless or improper operation, operator error, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

(9VAC5-50-80, 9VAC5-80-110 and Condition 4.ii of 02/13/73 NSR permit)

- 6. **Incinerator Requirements** (**I-1 and I-2**) **Limitations Plant Changes** No changes can be made to the plant operations after a stack test or sludge test has been conducted which would potentially increase mercury emissions above the level determined by the most recent test, until the new emission level has been estimated by calculations and the results reported to EPA and DEQ.

 (9VAC5-80-110, 9VAC5-60-70 E and 40 CFR 61, Subpart E, 61.53(d)(4) and 61.54(e))
- 7. Incinerator Requirements (I-1 and I-2) Limitations Fugitive Dust/Emissions 9VAC5 Chapter 40, Article 55 The permittee shall not cause or permit to be discharged into the atmosphere from any ash conveying system (including conveyor transfer points) any visible emissions for more than 5% of hourly observation period, measured at three, 1-hour observation periods as determined by EPA Method 22. (9VAC5-80-110 and 9VAC5-40-8240B)
- 8. Incinerator Requirements (I-1 and I-2) Limitations Operator Training and Certification 9VAC5 Chapter 40, Article 55 The existing sewage sludge incineration (SSI) units shall be in compliance with 9VAC5 Chapter 40, Article 55 for operator training and certification as follows:
 - a. The permittee shall comply with the operator training and qualification requirements as stated in 40 CFR 60.5130.
 - b. The permittee shall comply with the applicable dates for completing operator training as specified in 40 CFR 60.5135.
 - c. The permittee shall obtain/maintain operator qualification as specified in 40 CFR 60.5140 and 60.5145.
 - d. The permittee shall renew any lapsed operator qualifications as stated in 40 CFR 60.5150.
 - e. If all qualified operators are temporarily not accessible, the permittee shall comply as specified in 40 CFR 60.5155.
 - f. The permittee shall maintain/review documentation regarding operator training and qualification as specified in 40 CFR 60.5160.

(9VAC5-80-110 and 9VAC5-40-8270)

B. Monitoring

- 9. Incinerator Requirements (I-1 and I-2) Monitoring Visible Emission Evaluations The permittee shall observe the incinerator stack for the operating incinerator (I-1/I-2) one day during daylight normal operations within the first seven operating days of each month. If visible emissions are noted, the permittee shall take immediate appropriate action to correct the cause of the opacity. If such corrective action fails to correct the problem, a visible emissions evaluation (VEE) shall be conducted for at least six (6) minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE average for the six (6) minute period exceeds ten (10) percent, the VEE shall continue for one hour from initiation. All periodic visual evaluations, visible emission evaluations and corrective actions necessary shall be recorded in a logbook. The logbook shall be kept at the facility and made available for inspection by the DEQ for the most recent five (5) year period. (9VAC5-80-110)
- 10. **Incinerator Requirements** (**I-1 and I-2**) **Monitoring Compliance Assurance Monitoring** (**CAM**) **Scenario No. 1** The permittee shall monitor, operate, calibrate and maintain the scrubber system for the control of PM from the incinerators according to the following:

CAM SCENARIO NO. 1			
Indicator	Minimum water flow rates for precooler, venturi and impingement wet scrubber.		
Measurement Approach	Water flow rate is continuously measured via roto/vortex/mag meters.		
	An excursion is defined as any average water flow rate below the following:		
Indicator Ranges	Precooler 29 gallons per minute (gpm) Venturi 50 gpm Impingement 171 gpm		
Performance Criteria: Data Representativeness	Inflow water meters are installed for each component of the scrubber system (precooler, venturi and impingement).		
Response to Excursions	Maintenance will respond within two hours to make adjustments/repairs.		
Verification of Operational Status	N/A		
QA/QC Practices and Criteria	Zero flow checks on incinerator water flow meters for each incinerator cold start-up.		
Monitoring Frequency and Data Collection Procedure	Water flow rates are continuously measured by each meter; scale range is appropriate for each water flow meter as designated by the manufacturer. Water flow rates are recorded hourly (clock) for each meter.		

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Averaging Period	Three (clock) hours average for each water flow meter (up to eight 3-hour averages per calendar day).
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(9VAC5-80-110 E (Article 1) and 40 CFR 64.6 (c))

11. **Incinerator Requirements** – (**I-1 and I-2**) **- Monitoring - CAM Scenario No. 2 -** The permittee shall monitor, operate, calibrate and maintain the scrubber system for the control of PM from the incinerators according to the following:

CAM SCENARIO NO. 2			
Indicator	Minimum water flow rates for precooler, venturi and impingement wet scrubber.		
Measurement Approach	Water flow rate is continuously measured via roto/vortex/mag meters.		
	An excursion is defined as any average water flow rate below the following:		
Indicator Ranges	Precooler Venturi TBD gpm (95% of the value from a compliant stack test) TBD gpm (95% of the value from a compliant stack test) TBD gpm (95% of the value from a compliant stack test) TBD gpm (95% of the value from a compliant stack test)		
Performance Criteria: Data Representativeness	Inflow water meters are installed for each component of the scrubber system (precooler, venturi and impingement).		
Response to Excursions	Maintenance will respond within two hours to make adjustments/repairs.		
Verification of Operational Status	N/A		
QA/QC Practices and Criteria	Zero flow checks on incinerator water flow meters for each incinerator cold start-up.		
Monitoring Frequency and Data Collection Procedure	Water flow rates are continuously measured by each meter; scale range is appropriate for each water flow meter as designated by the manufacturer. Water flow rates are recorded hourly (clock) for each meter.		
Averaging Period	Three (clock) hours average for each water flow meter (up to eight 3-hour averages per calendar day).		

(9VAC5-80-110 E (Article 1) and 40 CFR 64.6 (c))

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12. **Incinerator Requirements** – (**I-1 and I-2**) – **Monitoring - CAM Plan Scenarios -** The permittee may select to use Monitoring Scenario No. 2 for the incinerator scrubber system only if the resulting compliant stack test emissions for Scenario No. 2 are less than the Scenario No. 1 emissions used to establish the listed minimum values for each component of the scrubber system. (9VAC5-80-110)

- 13. **Incinerator Requirements** (**I-1 and I-2**) **Monitoring CAM** The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9. (9VAC5-80-110 E (Article 1) and 40 CFR 64.6 (c))
- 14. **Incinerator Requirements** (**I-1 and I-2**) **Monitoring CAM** At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

 (9VAC5-80-110 E (Article 1) and 40 CFR 64.7 (b))
- 15. Incinerator Requirements (I-1 and I-2) Monitoring CAM Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the incinerators (I-1/I-2) are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.

 (9VAC5-80-110 E (Article 1) and 40 CFR 64.7 (c))
- 16. **Incinerator Requirements** (**I-1 and I-2**) **Monitoring CAM** Upon detecting an excursion or exceedance, the permittee shall restore operation of the incinerators (I-1/I-2) (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.

(9VAC5-80-110 E (Article 1) and 40 CFR 64.7 (d)(1))

17. **Incinerator Requirements** – (**I-1 and I-2**) - **CAM** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(9VAC5-80-110 E (Article 1) and 40 CFR 64.7(d)(2))

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Incinerator Requirements – (I-1 and I-2) - Monitoring - CAM - If the permittee identifies a failure to 18. achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, TRO Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (9VAC5-80-110 E (Article 1) and 40 CFR 64.7(e))

- Incinerator Requirements (I-1 and I-2) Monitoring CAM If the number of exceedances or 19. excursions exceeds 5 percent duration of the operating time for the incinerators (I-1/I-2) for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
 - a. Improved preventative maintenance practices;
 - b. Process operation changes;
 - c. Appropriate improvements to control methods;
 - d. Other steps appropriate to correct control performance; and
 - e. More frequent or improved monitoring. (9VAC5-80-110 E (Article 1) and 40 CFR 64.8(a) and (b))
- Incinerator Requirements (I-1 and I-2) Monitoring 9VAC5 Chapter 40, Article 55 The permittee 20. shall conduct, as applicable, the monitoring requirements specified by 9VAC5-40-8310 and 40 CFR 60.5220 and 60.5225. The permittee shall monitor the feed rate and moisture content of the sewage sludge fed to the sewage sludge incinerator as specified in 40 CFR 60.5170(f). The permittee shall continuously monitor the sewage sludge feed rate and calculate a daily average for all hours of operation during each 24-hour period. Keep a record of the daily average feed rate, as specified in §60.5230(f)(3)(ii). The permittee shall take at least one grab sample per day of the sewage sludge fed to the sewage sludge incinerator. If you take more than one grab sample in a day, calculate the daily average for the grab samples. Keep a record of the daily average moisture content, as specified in §60.5230(f)(3)(ii). (9VAC5-80-110 and 9VAC5-40-8310)

C. Recordkeeping

- Incinerator Requirements (I-1 and I-2) Recordkeeping The permittee shall obtain a certification from 21. the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier,
 - b. The date on which the oil was received,
 - c. The volume of distillate oil delivered in the shipment,
 - d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and
 - The sulfur content of the oil.

(9VAC5-80-110 and Condition 4 of 02/13/73 NSR permit)

- 22. **Incinerator Requirements** (**I-1 and I-2**) **Recordkeeping** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, TRO Regional Office. These records shall include, but are not limited to:
 - a. All fuel supplier certifications;
 - b. Any test for mercury in sludge or any test for mercury in stack emissions;
 - c. Incinerator visible emission observations, VEE records and any necessary corrective action taken as required by Condition 9;

These records shall be available on site for inspection by the DEQ and shall be current for the most recent (5) years.

(9VAC5-50-50, 9VAC5-80-110, 9VAC5-40-8320 and 40 CFR 60.5230)

- 23. **Incinerator Requirements** (**I-1 and I-2**) **Recordkeeping 9VAC5 Chapter 40, Article 55** The permittee shall maintain records, as applicable, in 9VAC5-40-50, 9VAC5-40-50 F and H, 40 CFR 60.7 and 40 CFR 60.5230. All records required by this condition shall be kept on site and made available for inspection by the DEQ. (9VAC5-80-110 and 9VAC5-40-8320)
- 24. **Incinerator Requirements** (**I-1 and I-2**) **CAM Recordkeeping** The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). (9VAC5-80-110 E and 40 CFR 64.9(b))

D. Testing

- 25. **Incinerator Requirements** (**I-1 and I-2**) **Testing Mercury Testing for Plant Changes** If plant changes project mercury emissions to exceed 1600 grams/24-hour period, a test for the level of mercury emissions from one incinerator (I-1 or I-2) shall be conducted within 60 days after the changes have been implemented. The sludge shall be tested for mercury levels using Method 105 of 40 CFR 61, Appendix B and following the requirements of 40 CFR 61.54(c) through 61.54(d), or an incinerator stack test performed using Method 101 A of 40 CFR 61, Appendix B and following the requirements of 40 CFR 61.53(d) or Method 29 of 40 CFR 60, Appendix A. The details of the test(s) are to be arranged with and approved prior to testing by the Director, Tidewater Regional Office. (9VAC5-80-110 and 40 CFR 61.55(a))
- 26. Incinerator Requirements (I-1 and I-2) Testing Performance Testing 9VAC5 Chapter 40, Article 55 The permittee shall meet, as applicable, the performance testing requirements specified by 40 CFR 60.5220. (9VAC5-80-110 and 9VAC5-40-8310)
- 27. **Incinerator Requirements** (**I-1 and I-2**) **Testing** If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9VAC5-80-110)

E. Reporting

- 28. **Incinerator Requirements** (**I-1 and I-2**) **Reporting Stack Test Protocol** The permittee shall submit a test protocol for a proposed incinerator stack test to the Director, Tidewater Regional Office at least 30 days prior to the test date. (9VAC5-80-110)
- 29. **Incinerator Requirements** (**I-1 and I-2**) **Reporting Stack Test Date** The permittee shall notify the Director, Tidewater Regional Office, of proposed stack test date(s) at least 30 days prior to the testing date(s). (9VAC5-80-110)
- 30. **Incinerator Requirements** (**I-1 and I-2**) **Reporting Stack Test Results** One copy of the particulate matter stack test results report for the incinerator shall be sent to the Director, Tidewater Regional Office within 60 days of test completion. (9VAC5-80-110)
- 31. **Incinerator Requirements** (**I-1 and I-2**) **Reporting Proposed Plant Changes 40** CFR **61**, **Subpart** E Notification of proposed changes to the plant operations which would potentially increase mercury emissions above the level determined by the most recent test under 40 CFR **61**, Subpart E, shall be sent at least 30 days prior to implementing such changes along with the new calculated mercury emissions to the Director, Tidewater Regional Office and EPA. (9VAC5-80-110 and 40 CFR **61**.53(d)(4) and **61**.54(e))
- 32. Incinerator Requirements (I-1 and I-2) Reporting Mercury Tests and 40 CFR 61, Subpart E Notification of proposed stack test date(s) or sludge sampling date(s) for mercury emissions shall be sent to the Director, Tidewater Regional Office and EPA at least 30 days prior to testing dates. (9VAC5-80-110 and 40 CFR 61.53(d) and 61.54(b))
- 33. Incinerator Requirements (I-1 and I-2) Reporting Mercury Tests and 40 CFR 61, Subpart E The stack test determination or sludge test determination for mercury emissions shall be completed within 30 days of sample collection. Each mercury emissions determination shall be dispatched within 15 calendar days of determination via registered letter to the Director, Tidewater Regional Office and EPA. (9VAC5-80-110 and 40 CFR 61.53(d) and 61.54(f))
- 34. Incinerator Requirements (I-1 and I-2) Reporting Notices for EPA 40 CFR 61, Subpart E Notices for EPA shall be sent to the following address:

U.S. EPA, Region III Air Protection (3AP12) Attn: 40 CFR 61, Subpart E Coordinator 1650 Arch Street Philadelphia, PA 19103-2029 (9VAC5-80-110)

35. **Incinerator Requirements** – (**I-1 and I-2**) – **Reporting** – **9VAC5 Chapter 40, Article 55** - The permittee shall submit reports, as applicable, required by 9VAC5-40-50, 9VAC5-40-50 F and H, 40 CFR 60.7 and 40 CFR 60.5235.

(9VAC5-80-110 and 9VAC5-40-8320)

- 36. **Incinerator Requirements** (**I-1 and I-2**) **CAM Reporting** The permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition 64 of this permit to the Director, Tidewater Regional Office. Such reports shall include at a minimum:
 - a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9VAC5-80-110 F and 40 CFR 64.9(a))

IV. Electrical Generators – (G-1, G-2, & G-3)

A. Limitations

- 37. **Electrical Generators (G-1, G-2, & G-3) Limitations Emission Controls** Nitrogen oxides (NOx) emissions from the engine generator sets (G-1 through G-3) shall be controlled by turbocharged and low temperature aftercooled engines. The permittee shall maintain documentation that demonstrates the control device has been installed on the engine-generator sets. (9VAC5-80-110, 9VAC5-50-260 and Condition 3 of 03/17/2014 NSR Permit)
- 38. **Electrical Generators** (G-1, G-2, & G-3) Limitations Visible Emissions Visible emissions from the engine-generator sets (G-1 through G-3) shall be controlled by the use of good operating practices and performing appropriate maintenance in accordance with the manufacturer recommendations. In addition, the permittee may only change those settings that are permitted by the manufacturer and does not increase air emissions.

(9VAC5-80-110, 9VAC5-50-260 and Condition 4 of 03/17/2014 NSR Permit)

39. **Electrical Generators (G-1, G-2, & G-3) - Limitations – Operation** – The permittee shall operate and maintain each engine-generator set (G-1 through G-3) and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer and does not increase air emissions.

(9VAC5-80-110 and Condition 6 of 03/17/2014 NSR Permit)

- 40. **Electrical Generators (G-1, G-2, & G-3) Limitations Emergency Power Generation** The enginegenerator sets (G-1 through G-3) shall only be operated in the following modes:
 - a. In situations that arise from sudden and reasonably unforeseeable events where the primary energy or power source is disrupted or disconnected due to conditions beyond the control of an owner or operator of a facility including:
 - i. A failure of the electrical grid;
 - ii. On-site disaster or equipment failure; or
 - iii. Public service emergencies such as flood, fire, natural disaster, or severe weather conditions.
 - b. For participation in an ISO-declared emergency, where an ISO emergency is:

- i. An abnormal system condition requiring manual or automatic action to maintain system frequency to prevent loss of firm load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property;
- ii. Capacity deficiency or capacity excess conditions;
- iii. A fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel;
- iv. Abnormal natural events or man-made threats that would require conservative operations to posture the system in a more reliable state; or
- v. An abnormal event external to the ISO service territory that may require ISO action.
- c. For periodic maintenance, testing, and operational training. (9VAC5-80-110 and Condition 7 of 03/17/2014 NSR Permit)
- 41. **Electrical Generators (G-1, G-2, & G-3) Limitations Operating Hours** Each of the engine-generator sets (G-1 through G-3) shall not operate more than 500 hours per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - (9VAC5-80-110 and Condition 8 of 03/17/2014 NSR Permit)
- 42. **Electrical Generators** (**G-1**, **G-2**, & **G-3**) **Limitations Fuel** The approved fuel for the engine-generator sets (G-1 through G-3) is diesel fuel. The diesel fuel shall meet the ASTM D975 specification for S15 diesel fuel oil with a maximum sulfur content per shipment of 0.0015% (15 ppm). A change in the fuel may require a permit to modify and operate.
 - (9VAC5-80-110, 9VAC5-50-260 and Condition 9 of 03/17/2014 NSR Permit)
- 43. **Electrical Generators (G-1, G-2, & G-3) Limitations Visible Emission Limit** Visible emissions from each of the engine-generator sets (G-1 through G-3) shall not exceed ten percent (10%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed twenty percent (20%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9VAC5-80-110, 9VAC5-50-260 and Condition 12 of 03/17/2014 NSR Permit)
- 44. **Electrical Generators (G-1, G-2, & G-3) Limitations Emissions –** Emissions from the operation of the engine-generator sets (G-1 through G-3) shall not exceed the limits specified below:

Pollutants	Each Generator (lbs/hr)	Each Generator (tons/yr)	Combined (tons/yr)
Particulate Matter (Filterable PM)	0.7	0.2	0.6
Carbon Monoxide	5.2	1.3	3.9
Nitrogen Oxides + Non-Methane Hydrocarbons (NO ₂ + NMHC)	28.1	7.0	21.0

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 37-43 and 45-47. (9VAC5-80-110, 9VAC5-50-260 and Condition 11 of 03/17/2014 NSR Permit)

B. Monitoring

- 45. **Electrical Generators** (G-1, G-2, & G-3) **Monitoring Monitoring Devices** Each engine-generator set (G-1 through G-3) shall be equipped with a non-resettable hour metering device to monitor the operating hours. The non-resettable hour meter used to continuously measure the hours of operation for each engine-generator set shall be observed by the permittee with a frequency of not less than once each day the engine-generator set is operated. The permittee shall keep a log of these observations.
- 46. Each monitoring device shall be installed, maintained, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspections and shall be in operation when the engine-generator set is operating.

 (9VAC5-80-110 and Condition 5 of 03/17/2014 NSR Permit)

C. Recordkeeping

- 47. **Electrical Generators (G-1, G-2, & G-3) Recordkeeping Fuel Certification** The permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier;
 - b. The date on which the diesel fuel was received;
 - c. The quantity of diesel fuel delivered in the shipment;
 - d. A statement that the diesel fuel complies with the American Society for Testing and Materials specifications (ASTM D975) for S15 diesel fuel oil; and
 - e. The sulfur content of the diesel fuel.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 42. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9VAC5-80-110 and Condition 10 of 03/17/2014 NSR Permit)

- 48. **Electrical Generators** (**G-1**, **G-2**, & **G-3**) **Recordkeeping** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
 - a. Annual hours of operation of each engine-generator set, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. All fuel supplier certifications.
 - c. Engine information including make, model, serial number, model year, maximum engine power (bhp), and engine displacement for each engine-generator set.
 - d. The manufacturer's written operating instructions or procedures developed by the owner/operator that are approved by the engine manufacturer for each engine-generator set.

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limited to, the date, cause of operation, cause of the emergency, the ISO-declared emergency notification, and the hours of operation based on the non-resettable hour meter.

- f. Scheduled and unscheduled maintenance and operator training.
- g. All records as required by 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

e. Records of the reasons for operation for each engine-generator set (G-1 through G-3), including, but not

(9VAC5-80-110, 9VAC5-50-50 and Condition 14 of 03/17/2014 NSR Permit)

D. Testing

49. Electrical Generators (G-1, G-2, & G-3) - Testing – The facility shall be modified so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be

(9VAC5-80-110, 9VAC5-50-30 and Condition 13 of 03/17/2014 NSR Permit)

Electrical Generators (G-1, G-2, & G-3) - Testing – If testing is conducted in addition to the monitoring 50. specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9VAC5-80-110)

E. NSPS Subpart IIII

- Electrical Generators (G-1, G-2, & G-3) 40 CFR 60 Subpart IIII The emergency, diesel-fired, 51. stationary compression ignition internal combustion engines (ICE) (G-1 through G-3) shall be in compliance with 40 CFR 60 Subpart IIII as follows:
 - The permittee shall meet the emission standards for emergency engines as specified in 40 CFR 60.4205(b);
 - b. As per §60.4206, the permittee shall operate and maintain the stationary compression ignition internal combustion engines (G-1 through G-3) that achieve the emission standards as required in §60.4205 over the entire life of the engines;
 - c. The permittee shall only burn diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, as specified in §60.4207;
 - d. The permittee shall meet the monitoring requirements, as applicable, in §60.4209 and §60.4211;
 - e. The permittee shall comply with the applicable general compliance requirements according to §60.4211;
 - The permittee shall comply with the applicable testing requirements according to §60.4212;
 - The permittee shall meet the applicable requirements for notification, reporting, and recordkeeping according to §60.4214; and

h. The permittee must operate the emergency stationary internal engines (ICE) according to the requirements in §60.4211(f)(1) through §60.4211(f)(3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (f)(3) of §60.4211, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (f)(3) of §60.4211, the engine will not be considered an emergency engine under 40 CFR 60 Subpart IIII and must meet all requirements for non-emergency engines.

(9VAC5-80-110 and 40 CFR 60 Subpart IIII)

F. MACT Subpart ZZZZ

- 52. **Electrical Generators** (G-1, G-2, & G-3) 40 CFR 63 Subpart ZZZZ The new, stationary reciprocating internal combustion engines (G-1 through G-3) located at an area source for hazardous air pollutants (HAPs) shall be in compliance with 40 CFR 63 Subpart ZZZZ as follows:
 - a. The permittee shall meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII as specified in 40 CFR 63.6590(c).

(9VAC5-80-110 and 40 CFR 63 Subpart ZZZZ)

V. Gasoline Dispensing Facility (T-42)

A. MACT Subpart CCCCCC

- 53. **Gasoline Dispensing Facility** (**T-42**) **40 CFR 63 Subpart CCCCC** The gasoline dispensing facility (GDF) (T-42) with a monthly throughput of less than 10,000 gallons of gasoline, located at an area source for hazardous air pollutants (HAPs) shall be in compliance with 40 CFR 63 Subpart CCCCCC as specified in §63.11116, and summarized as follows:
 - a. The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
 - i. Minimize gasoline spills;
 - ii. Clean up spills as expeditiously as practicable;
 - iii. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and
 - iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
 - b. The permittee must have records available within 24 hours of a request to document gasoline throughput.
 - c. The permittee must comply with the requirements of this subpart by the applicable dates specified in §63.11113.
 - d. Portable gasoline containers that meet the requirements of 40 CFR 59, Subpart F, are considered acceptable for compliance with paragraph (a)(iii) of this section.

e. Monthly throughput means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

(9VAC5-80-110 and 40 CFR 63 Subpart CCCCCC)

VI. Insignificant Emission Units

54. **Insignificant Emission Units -** The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720 B)	Rated Capacity 9VAC5-80-720 C)
ISU-CB-31	One (1) Emergency Generator	9VAC5-80-720 C.4	N/A	107 hp (80 kW)
ISU-CB-48	One (1) Portable Emergency Electrical Generator	9VAC5-80-720 C.1a	VOC	25,470 BTU/hr
ISU-T-49/50	Two (2) Distillate Oil ASTs (275 & 265 gallons)	9VAC5-80-720 B.2	VOC	N/A
ISU-T-33a/33b	Two (2) Distillate Oil ASTs 20,000 gallons each (installed after 1984)	9VAC5-80-720 B.2	VOC	N/A
ISU-T- 32a/32b/32c/32d	Four (4) Distillate Oil ASTs 20,000 gallons each (installed prior to 1984)	9VAC5-80-720 B.2	VOC	N/A

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110.

VII.Permit Shield & Inapplicable Requirements

55. **Permit Shield & Inapplicable Requirements -** Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60 Subpart O	NSPS for Sewage Treatment Plants	Incinerator that charges more than 2205 lb/day of municipal sewage sludge (dry basis)
40 CFR 61 Subpart C	NESHAP for Beryllium	Incineration of Beryllium wastes
40 CFR 63 Subpart VVV	NESHAP for POTWs	New and reconstructed major HAPs POTWs
40 CFR 60 Subpart Kb	NSPS for Volatile Organic Storage Vessels	New and reconstructed tanks after 07/23/84 and capacity at or over 75 m³ and less than 151 m³ with vapor pressure less than 15.0 kPa.

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Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9VAC5-80-140)

VIII. General Conditions

56. **General Conditions - Federal Enforceability -** All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9VAC5-80-110 N)

- 57. **General Conditions Permit Expiration -** This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

 (9VAC5-80-80 B, C, and F, 9VAC5-80-110 D, and 9VAC5-80-170B)
- 58. **General Conditions Permit Expiration -** The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration. (9VAC5-80-80 B, C, and F, 9VAC5-80-110 D, and 9VAC5-80-170B)
- 59. **General Conditions Permit Expiration -** If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150. (9VAC5-80-80 B, C, and F, 9VAC5-80-110 D, and 9VAC5-80-170B)
- 60. **General Conditions Permit Expiration -** No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80. (9VAC5-80-80 B, C, and F, 9VAC5-80-110 D, and 9VAC5-80-170B)
- 61. **General Conditions Permit Expiration -** If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

 (9VAC5-80-80 B, C, and F, 9VAC5-80-110 D, and 9VAC5-80-170B)
- 62. **General Conditions Permit Expiration -** The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application. (9VAC5-80-80 B, C, and F, 9VAC5-80-110 D, and 9VAC5-80-170 B)

- 63. **General Conditions -Recordkeeping and Reporting -** All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement. (9VAC5-80-110 $\mbox{F})$
- 64. **General Conditions -Recordkeeping and Reporting -** Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9VAC5-80-110 F)

- 65. **General Conditions -Recordkeeping and Reporting -** The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedance of emissions limitations or operational restrictions;
 - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
 - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9VAC5-80-110 F)

66. **General Conditions - Annual Compliance Certification -** Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- b. The identification of each term or condition of the permit that is the basis of the certification.
- c. The compliance status.
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- e. Consistent with subsection 9VAC5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- f. Such other facts as the permit may require to determine the compliance status of the source.
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov (9VAC5-80-110 K.5)

- 67. **General Conditions Permit Deviation Reporting -** The permittee shall notify the Director, Tidewater Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 64 of this permit. (9VAC5-80-110 F.2 and 9VAC5-80-250)
- 68. **General Conditions Failure/Malfunction Reporting -** In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Tidewater Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9VAC5-40-50 C and 9VAC5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9VAC5-40-40 and 9VAC5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Tidewater Regional Office. (9VAC5-20-180 C)
- 69. **General Conditions Severability -** The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit. (9VAC5-80-110 G.1)
- 70. **General Conditions Duty to Comply -** The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application. (9VAC5-80-110 G.2)

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71. **General Conditions - Need to Halt or Reduce Activity not a Defense -** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (9VAC5-80-110 G.3)

- 72. **General Conditions Permit Modification -** A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9VAC5-80-190 and 9VAC5-80-260)
- 73. **General Conditions Property Rights -** The permit does not convey any property rights of any sort, or any exclusive privilege. (9VAC5-80-110 G.5)
- 74. **General Conditions Duty to Submit Information -** The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality. (9VAC5-80-110 G.6)
- 75. **General Conditions Duty to Submit Information -** Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G. (9VAC5-80-110 K.1)
- 76. **General Conditions Duty to Pay Permit Fees** The owner of any source for which a permit under 9VAC5-80-50 through 9VAC5-80-300 was issued shall pay permit fees consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9VAC5-80-2340, adjusted annually by the change in the Consumer Price Index.

 (9VAC5-80-110 H, 9VAC5-80-340 C and 9VAC5-80-2340 B)
- 77. **General Conditions Fugitive Dust Emission Standards -** During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
 - a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
 - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;

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- d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9VAC5-40-90, 9VAC5-50-90, and 9VAC5-40-8240A)

78. **General Conditions - Startup, Shutdown, and Malfunction -** At all times, including periods of startup, shutdown, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9VAC5-50-20 E and 9VAC5-40-20 E)

- 79. **General Conditions Alternative Operating Scenarios -** Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1. (9VAC5-80-110 J)
- 80. **General Conditions Inspection and Entry Requirements -** The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
 - a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
 - d. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9VAC5-80-110 K.2)

- 81. **General Conditions Reopening For Cause -** The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:
 - a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.
 (9VAC5-80-110 L)
- 82. **General Conditions Permit Availability -** Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9VAC5-80-150 E)
- 83. **General Conditions Transfer of Permits -** No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another. (9VAC5-80-160)
- 84. **General Conditions Transfer of Permits -** In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200. (9VAC5-80-160)
- 85. **General Conditions Transfer of Permits -** In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200. (9VAC5-80-160)
- 86. **General Conditions Malfunction as an Affirmative Defense -** A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements stated in Condition 87 (next condition) are met. (9VAC5-80-250)
- 87. **General Conditions Malfunction as an Affirmative Defense -** The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9VAC5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9VAC5-20-180 C.

(9VAC5-80-250)

- 88. **General Conditions Malfunction as an Affirmative Defense -** In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. (9VAC5-80-250)
- 89. **General Conditions Malfunction as an Affirmative Defense -** The provisions of Conditions 86-88 (previous 3 conditions) are in addition to any malfunction, emergency or upset provision contained in any applicable requirement. (9VAC5-80-250)
- 90. **General Conditions Permit Revocation or Termination for Cause -** A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

(9VAC5-80-190 C and 9VAC5-80-260)

- 91. **General Conditions Duty to Supplement or Correct Application -** Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9VAC5-80-80 E)
- 92. **General Conditions Stratospheric Ozone Protection -** If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (40 CFR Part 82, Subparts A-F)
- 93. **General Condition Asbestos Requirements -** The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9VAC5-60-70 and 9VAC5-80-110 A.1)

- 94. **General Condition Accidental Release Prevention** If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

 (40 CFR Part 68)
- 95. **General Conditions Changes to Permits for Emissions Trading** No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9VAC5-80-110 I)

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96. **General Conditions - Emissions Trading -** Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.
- b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.

(9VAC5-80-110 I)

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IX. State-Only Enforceable Requirements

97. **State-Only Enforceable Requirements -** The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9VAC5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

Odor: 9VAC5-40-140 and 9VAC5-50-140

State Toxics Rule: 9VAC5-60-220 and 9 VAC5-60-320

Existing Source Standards for Hydrogen Sulfide: 9VAC5-40-290

(9VAC5-80-110 N, 9VAC5-80-300, 9VAC5-40-8250, and 9VAC5-40-8260)